

BAE ET AL. - 10/525, v.2
Attorney Docket: 061063-0315051

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended): A method for eliminating boron contamination in an annealed wafer, the method comprising, annealing a silicon wafer having a surface on which a native oxide film has formed containing boron of environmental origin or from chemical treatment prior to the annealing,

wherein in the annealing, the silicon wafer is subjected to temperature heat-up in a mixed gas atmosphere having a ratio of hydrogen gas to an inert gas of 5% to 100% so as to remove the boron-containing native oxide film, and subsequent annealing in an inert gas atmosphere,

and a boron concentration in the wafer surface and a boron concentration in the bulk silicon are made to be substantially same by the annealing,

wherein a ratio of the boron concentration in the wafer surface to the boron concentration in the bulk silicon is controlled to be 0.78 to 1.10.

2. (Previously Presented): The method for eliminating boron contamination in an annealed wafer according to claim 1, wherein a treatment temperature of the temperature heat-up in the mixed gas atmosphere is from 700°C to 1,200°C.

3. (Previously Presented): The method for eliminating boron contamination in an annealed wafer according to claim 1, wherein the temperature heat-up is carried out in the mixed gas atmosphere in which the ratio of the hydrogen gas to the inert gas is from 10% to 30%.

4. (Previously Presented): The method for eliminating boron contamination in an annealed wafer according to claim 2, wherein the temperature heat-up is carried out in the mixed gas atmosphere in which the ratio of the hydrogen gas to the inert gas is from 10% to 30%.

5. (Cancelled)